

## **The Effectiveness of Pedagogical Code Switching and Learner's Language Attitude on EFL Learner's Learning Outcomes**

Mujiono<sup>1</sup>

<sup>1</sup>Department of English Education, Faculty of Language and Literature, University of Kanjuruhan Malang, East Java, Indonesia

Correspondence: Mujiono, University of Kanjuruhan Malang, Jawa Timur, Indonesia.

Email: moejie\_nova@unikama.ac.id, moejie\_nova73@yahoo.com

Received: May 29, 2017

Accepted: July 19, 2017

Online Published: September 1, 2017

doi: 10.23918/ijsses.v4i1p40

**Abstract:** The aim of this study was to know the effectiveness of pedagogical code switching (CS) and learner's language attitude on EFL learner's learning outcomes. This study was carried out at State Junior High School 23 of Malang, East Java. A quasi experimental design was used in this study. To this end, 68 students of 230 were randomly selected. The instruments used in this study were English tasks which required the students to answer in English and language attitude scale. The findings of this study revealed that (1) there was a significant difference between the students who were given pedagogical CS and those who were not given pedagogical CS on EFL learner's learning outcomes ( $P=.001<.05$ ), (2) there was a significant correlation between language attitude and EFL learner's learning outcomes ( $r=.253$ ;  $P=.038<.05$ ), and (3) there was an interaction between pedagogical CS student's language attitude on EFL learner's learning outcomes ( $F=2.76$ ;  $P=.027<.05$ ). And determinant coefficient showed that 17.5% contributed to the EFL learner's learning outcomes.

**Keywords:** pedagogical code switching, EFL learner, and learning outcomes

### **1. Introduction**

The use of two or more languages in EFL instruction in classroom activity leads to a phenomenon which codes are switched. Pedagogical CS used by both teachers and students in EFL classroom instruction as a strategy to deliver English learning materials (Mujiono, 2013; Modupeola, 2013). The facts indicate that it is not uncommon for teachers to switch a language to another language. The use of CS is a lingual phenomenon that emerges as the implications of bilingualism. Brice and Roseberry as cited by (Mujiono, 2016) assert that the use of more than one languages by bilingual people lead to the use of CS. Ling, (2014) also reports that CS is applied by both teacher and students in EFL classroom activity. The use of pedagogical CS by teachers in EFL classroom interaction is viewed as one of the teacher's efforts to overcome the difficulties of delivering learning material. The finding of this study supports Ling's study that reports in a situation as well as the language of EFL teaching and learning as a formal process, teachers often have difficulties in delivering material to the students. To overcome these difficulties, the teacher tries several learning strategies. So in EFL classroom, especially English learning, teachers and students use two languages interchangeably. The alternation of language such as this is a communication

strategy (Mujiono, 2013; Inuwa, 2014). As reported by Bista, (2010) he calls it as strategies of interaction in the classroom.

The phenomenon of pedagogical CS can be caused by multiple factors related to the context of the communication situation. Mujiono (2016) reports that the factors that caused the use of CS in EFL learning in Junior High School are the involvement of learner, the use of learner's language, the situation of classroom, the weariness of the teacher, and the expression of teacher's anger. This findings showed that the five factors had significant effect toward learners' language attitude to use CS in EFL instruction in the classroom. It's proved that  $p(\text{sig.}) = .000 < .05$ . From the test result of the homogeneous subject with subsets for Alpha .05. Out of those five factors, the use of learner's language influences the use of CS in EFL learners dominantly (Mujiono, 2016). If it is chained to the communicative function, the use of CS as what be reported above showed the communication capability of the both English teachers and students. Therefore the diction and language choice influence to the success of the communication. Student's interaction and participation psychologically in English communication can be boosted by using CS formed by their mother language, Indonesian language, which can raises up the communicative action. Nine functions of CS in the EFL learning in Junior High School was found, such as; (a) to make the statement more clear (b) to grow up the intimate relation in the class (c) to entertains and raises up humorous (d) to remind (e) to rewind the main aim of the speak (f) to strength demand or command (g) to give question (h) to clarify (i) to motivate the learners to learn (Mujiono, 2016).

The function of CS as what explained above academically can boost the students to involve in the material emotionally. Involvement of students or student's participation can help the EFL learners to find the effectiveness of learning and achievement of the learning outcomes. That is why the use of CS cannot be denied and avoided by them. From the perspective of sociolinguistics, teachers and students have different first language, so by using pedagogical CS, the communication will be getting better and communicative. As what stated by Krieger, (2005) the use of the first language (L1) in EFL classroom is sometimes indispensable, especially for explanation and affirmation of linguistic structure. Research conducted by Mugaddam (2013) shows that the use of the switching from L1 to L2 can motivate the interaction in the class. The different knowledge and expertise of English of students can be balanced and united by using the same language that they know. To achieve better EFL learning outcomes, giving pedagogical CS by the teacher in teaching and learning process is important point. They are supported to know not only grammatical rules such as focusing on lexical, grammatical and content errors, but also writing conventions in a particular culture such as, word choice to build vocabulary items, constructing well-formed sentence, and exploring ideas.

## **2. Related Literature**

### **2.1 The Notion of Pedagogical CS**

The use of two or more languages in a conversation often called CS. It occurs in the bilingual and multilingual community. Hudson, (1996) has defined that CS is anyone who speaks more than one language choose between them according to circumstance. It is also called that CS is one form of use more than one languages are spoken by bilingual speaker with selecting one language or code adapted to

the circumstances. Poedjosoedarmo (1978) has boundaries CS such as a speaker doesn't take only little part of the language, but at least a clause from another code. It means that the insertion of a foreign language not only by the lexicon but also more to the syntaxes unit. Further, he also explains that a person tends to use CS often in a conversation. The switch can be either realized or unrealized by the speaker him/herself. In other words, Poedjosoedarmo (1978) says that CS in this way happens because of the variety of language component.

In a different point of view, Gumperz (1982) has explained that CS could be seen as a real, specific discourse strategy for bilingual people. Further, Gumperz (1982) reveals that CS is a conversational strategy, the function of which is to express social meaning. CS is a communication strategy for expressing social meaning. The speakers switch code in order to be easily understood by the addressee. They generally want to balance his language with their speaking partners. According to Hymes (1989), CS is the common technical form to call the change of two or more language, some variation of a language, or even some different style of a kind. Hudson, (1996) explains that in the multilingual community, different languages are used in some specific condition, and controlled by society. The use of a code is a logic consequent happening in the bilingual or multilingual communication. CS might be used in a bilingual and multilingual community such as EFL classroom interaction. The members of the community like teachers and students with two or more languages ability can switch the use of language based on the importance of situation and condition. They switch the language as well as the use the code on special purposes to make the materials presentation be able to be understood by the learners well.

Based on the explanation by above experts, it can be concluded that the pedagogical CS here is the use of two or more languages, in turn, the use of language's varieties in the both same language or even the language style of multilingual and bilingual society such as in classroom communication.

## **2.2 Pedagogical CS in EFL Instruction Process**

Pedagogical CS in the teaching-learning process is often created with various patterns. This is might be because of the various background conditions of students. In Junior High School, pedagogical CS happens in EFL classes. Bilingual society tends to use CS in daily life too. CS in society can be viewed as a communication strategy (Svendsen, 2014). The use of CS stylistically connected to the purpose of emphasizing or to smooth the statement like request, denial, topic exchange, elaborate, or comment, validity or clarify.

The indication of CS has a natural value for some events for the speaker with two or more languages. Based on Muysken, (2000) CS is the use of some language in turn by the speaker. In another part, Muysken, (2000) states that CS is the alternative use two language or more by a bilingual speaker in the conversation. Pedagogical CS happens in terms of an education system is not as natural as what is created in society. In the learning process, pedagogical CS tends to be used as the interaction process. This also explained more by Heller (1998) that CS is a process of two or more languages are used in turn. As same as what stated by Auer (1995) that the use of one foreign word in a conversation can be concluded as CS. This is also supported by Dabene (1995) who named this kind of CS as unitary CS. Dabene (1995) has boundaries 4 kinds of CS; (1) CS in two statements by one speaker, (2) CS between sentences, (3) CS in the sentence, and (4) segmental CS which is created by modified a segment of statement with clause and phrase. Gumperz (1982) introduces six categories of CS function in

conversation that are to quote, to specialize the receiver, to give exclamation, to repeat the statement, to border the message, and to personalize.

Further, Heller (1998) concludes the results of some studies which are carried out by language experts about the function of CS as the strategy of communication, such as (1) to state anger or emphasize argument (2) to enchant the hearer (3) to involve third person in conversation, (4) to decrease criticism, and (5) to comment the relation between the speaker and the person in the conversation. The functions of pedagogical CS in classroom itself are to decrease warning, to avoid unnecessary things, to give metalinguistic comment, to whisper, to quote, to specialize the receiver, to move the learning concept, to translate, to give order or procedure, to explain, to check the understanding, to change the skeleton of a discourse, to represent the character on a narration, and to mark the topic change (Auer, 1998; Martin, 1995).

Dealing with the problems which are stated above and to handle difficulties in the process to deliver material particularly in EFL instruction, some strategies to break the language gap is still being tried by teachers. Teachers use pedagogical CS from English to Indonesian or vice-versa in order to be easily understood by the learners and to make the learners understand the better material being presented by teachers. Besides used as a strategy, pedagogical CS also used as managerial strategy for teaching system.

### 3. Methods

#### 3.1 Design of the Study

This study applied a quasi-experimental method. It was an experimental study by pretest and posttest design. This allowed the application of giving treatment on the experimental group and comparison with the control group. Quasi-experimental design in this study is nonequivalent pretest and posttest such as presented in the picture 3.1 below:

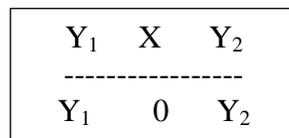


Figure 1: Nonequivalent Pretest-Posttest Design

#### 3.2 Population and Sample

The population of this study was students of class VIII of second semester of State Junior High School 23 of academic year 2016/2017 which consists of six classes of 230 students. Based on the characteristics of the population, the sample of this study were 68 students selected randomly.

#### 3.3 Instruments

The instruments used in this study are in the form of preliminary test and final test. Attitude scale used to determine students' language attitudes towards the use of pedagogical CS by the teacher. To

determine the validity of items, the product moment correlation proposed by Pearson was applied. And to find the reliability of the test used Spearman-Brown formula. To see the quality of the test, an analysis of the item difficulty and discrimination index level was implemented.

### 3.4 Data Analysis

Before hypothesis test was conducted, prerequisite analysis had been done first. That prerequisite test was formed by normality test and homogeneity of variance. Normality test had a purpose to know the distribution of score of EFL learning outcomes for each group whether it was normal or not. *Chi-square* analysis was used in this case. While the homogeneity of the test had a purpose of proving that the sample was truly based on the homogeneous population, homogeneity of variance with Bartlett test was used. A hypothesis test was applied by the statistical method with Two-Way analysis of variance (ANOVA).

## 4. Findings and Discussion

### 4.1 Findings

Based on the result of *t*-test analysis found that the average score of students taught by using pedagogical CS strategy got better achievement scores than those who did not. *T*-test result showed that the .000 significance value less than 05. Here are the results of analysis of pre-test and post-test of the experimental group. To know the analysis of pre-test and post-test of the experimental group, notice the following Table 1.

Table 1: Analysis of pre-test and post-test of the experimental group

| Test Type | Mean    | SD       | Sig. (2-tailed) | $\chi$ | N  |
|-----------|---------|----------|-----------------|--------|----|
| Pre-test  | 66.3235 | 6.06890  | .000            | .05    | 34 |
| Post-test | 75.5882 | 10.05777 |                 |        | 34 |

Table 1 showed that  $P=.000 < \chi=.05$  (*p*-value is less than); so the null hypothesis was rejected. Students were given the pedagogical CS strategy got better EFL learning outcomes than those who before being given the pedagogical CS strategy. To know whether there was a significant different between the students who were given pedagogical CS and those who were not given pedagogical CS on EFL learner's outcomes, notice the following Table 2.

Table 2: The t-test analysis of the Post-test scores on the overall performance of the Control and Experimental groups

| Groups           | Mean    | SD       | Sig. (2-tailed) | $\chi$ | N  |
|------------------|---------|----------|-----------------|--------|----|
| Experiment Group | 77.5000 | 10.16903 | .001            | .05    | 34 |
| Control Group    | 70.1471 | 7.22845  |                 |        | 34 |

Table 2 showed that  $P=.001 < \chi=.01$  (*p*-value is less than); so the null hypothesis was rejected. This means that there was a significant difference between students who were taught by using pedagogical CS strategy and those who were not taught by using pedagogical CS strategy. The average score (77.5000)

for the experimental group was greater than the average score of control group, 70.1471. It implied that treatment had significant effect on overall performance in EFL learner's outcomes. The Experimental group performance is better than that of the Control group. To know the correlation relation between students' language attitudes toward the use of pedagogical CS and EFL learning outcomes and how many percent its determinant coefficient, the following Table 3 can be noticed.

Table 3: Correlation relation analysis of students' language attitudes toward the use of CS in EFL learning result

| N  | Coefficient Correlation | Determinant Coefficient | Probability | $\alpha$ | Correlation Level |
|----|-------------------------|-------------------------|-------------|----------|-------------------|
| 68 | .253                    | 17.5%                   | .038        | .05      | Sufficient        |

Table 3 showed that  $r=.253$  with  $P=.038$  was less than  $\alpha=.05$ ; hence the null hypothesis was rejected. This implies that there was a positive correlation between students' language attitude on the use of pedagogical CS and EFL learning outcomes. Coefficient determinant showed that language attitude of using pedagogical CS provided 17.5% to contribute EFL learning outcomes. To know the interaction between pedagogical CS and students' language attitude on EFL learning outcomes, notice the following Table 4.

Table 4: F-test analysis of interaction between the using of CS strategy and students' language attitudes toward the EFL learning result by students

| N  | Sources   | Mean square | Probability | $\alpha$ | F     |
|----|---|-------------|-------------|----------|-------|
| 68 | The using of CS strategy<br>*language attitudes | 182.169     | .027        | .05      | 2.767 |

Table 4 showed that  $F=2.767$  with  $P=.027$  was less than  $\alpha=.05$ ; hence the null hypothesis was rejected. This implies that there was an interaction between pedagogical CS and students' language attitude of the use of pedagogical CS on EFL learning outcomes. Coefficient determinant showed that LI provided 17.5% to contribute EFL learning outcomes. It meant that the students who were provided pedagogical CS had better their EFL learning outcomes than those who were not provided EFL learning outcomes. It can be concluded that giving pedagogical CS to EFL learners was effective to improve their EFL learning outcomes.

## 5. Discussion

The use of pedagogical CS on teaching and learning process in EFL classroom communication happened due to the bilingual condition of the teacher. Pedagogical CS occurs in EFL classroom communication where the teacher is aware of using two or more languages and he is able to keep them apart, although it is not used by him habitually. Using pedagogical CS in the classroom is one of conversation strategies used in either bilingual or multilingual classroom. Bilingual learners will tend to use two or more languages for communicating in EFL classroom. A bilingual speaker does not only fluent in that language but also have a deep understanding of the rules of the language. It may be stated that a

bilingual learner tends to use CS frequently. Dealing with this statement, Coulmas (2005) states that CS is regarded as controllable strategy. According to Hariri, (2015) CS is used for processing the teaching interaction and makes it smoother. It is also used as the form communication which usually happens on bilingual and multi-speaker and society (Martin, 1995), (Muysken, 2000). Therefore, the use of CS supported by the L1 is needed to make clear and explain the concept of language better (Krieger, 2005). As Krieger (2005) reveals that the use of L1 in EFL classroom is sometimes indispensable, particularly for giving explanation and affirmation of literary concepts and language structure. Further, he explain that motivation of learner can be raised by using of their L1 to describe those parts of the language that it is difficult to understand if it is described in English. Bista (2010) reports that the main factors of the learners use CS are due to the incapability in using L2. It is also for avoiding confusion and misunderstanding. The use of pedagogical CS has been viewed as one of the efforts of the teacher to make the learners easier understand materials, particularly in EFL classroom activities. CS used by a teacher in EFL classroom has purposes for make clear and easier for giving information and material (Amorim, 2012; Mujiono, 2013, 2016; Zabrodskaia, 2007). Cook (2001) has described that the aim of using CS by the teachers is to enhance their competence to communicate especially to communicate in classroom. In terms of it, Mujiono (2013) reports that the teacher switches English to Indonesian language or vice-versa to deliver material in EFL classroom. It is conducted in order to make the learners understand better material being presented. This is supported by (Bista, 2010; Herlina K, 2007; Iqbal, 2011; Jingxia, 2010; A. M. Y. Lin, 2013; Mujiono, 2013; Zabrodskaia, 2007), who adds that the use of CS can be used as one of the easy strategies to inform the material in EFL learning activity. The ideology of teacher in using CS also described by (Caccamo, 2002; A. Lin, 2013) and there are few other similar research such as (Alhazmi, 2016) talk about the use of CS in both formal and informal situation. (Jørgensen, 2003) also gives his thought that there is multi-variety CS. Out of the reasons stated above, more reasons teachers tend to use CS are because they want to introduce the bilingual education system, and try to teach students using two languages. That is why the use of CS is effectively used as the strategy for delivering the material and communication tools with the student.

## 6. Conclusion

Analysis of pre-test and post-test of the experimental group showed that  $P=.000 < \alpha=.05$  ( $p$ -value is less than); so the null hypothesis was rejected. Students were given the pedagogical CS strategy got better EFL learning outcomes than those who before being given the pedagogical CS strategy.

The t-test analysis of the Post-test scores on the overall performance of the Control and Experimental Groups showed that  $P=.000 < \alpha=.01$  ( $p$ -value is less than); so the null hypothesis was rejected. This means that there was a significant difference between students who were taught by using pedagogical CS strategy and those who were not taught by using pedagogical CS strategy. The average score (79.1000) for the experimental group was greater than the average score of control group, 72.4000. It implied that treatment had significant effect on overall performance in EFL learner's outcomes. The Experimental group performance is better than that of the Control group.

The correlation relation analysis of students' language attitudes toward the use of pedagogical CS and EFL learning outcomes showed that  $r=.253$  with  $P=.038$  was less than  $\alpha=.05$ ; hence the null hypothesis was rejected. This implies that there was a positive correlation between students' language attitude on

the use of pedagogical CS and EFL learning outcomes. Coefficient determinant showed that language attitude of using pedagogical CS provided 17.5% to contribute EFL learning outcomes.

F-test analysis of interaction between the using of pedagogical CS strategy and students' language attitudes toward pedagogical CS on EFL learning outcomes showed that  $F=2.767$  with  $P=.027$  was less than  $\alpha=.05$ ; hence the null hypothesis was rejected. This implies that there was an interaction between pedagogical CS and students' language attitude of the use of pedagogical CS on EFL learning outcomes. It meant that the students who were provided pedagogical CS had better their EFL learning outcomes than those who were not provided pedagogical CS on EFL learning outcomes. It can be concluded that giving pedagogical CS to EFL learners was effective to improve their EFL learning outcomes.

## References

- Alhazmi, A. (2016). Linguistic Aspects of Arabic-English Code Switching on Facebook and Radio in Australia. *Ijalel* 5(3). 184-198. <https://doi.org/10.7575/aiac.ijalel.v.5n.3p.184>
- Amorim, R. (2012). Code switching in student-student interaction ; functions and reasons!, *Revista de Estudos Linguísticos da Univerdade do Porto* . 7. 177 - 195.  
<http://ler.letras.up.pt/uploads/ficheiros/10749.pdf>
- Auer, P. (1995). *The Pragmatics of Code Switching: a Sequential Approach*. Cambridge: Cambridge University Press. 6. 115-135
- Auer, P. (1998). From Code-switching via Language Mixing to Fused Lects : Toward a Dynamic Typology of Bilingual Speech. *Interaction and Linguistic Structures*, 6. 1-28  
<https://pdfs.semanticscholar.org/eff3/f8e1f529be7adf185f3af2d55f923322189a.pdf>
- Bista, K. (2010). Factors of Code Switching among Bilingual English Students in the University Classroom: A Survey. *Journal of English for Specific Purpose*. 9 (29).
- Caccamo, C. A. (2002). Introduction: Class and ideology in code-switching research, *International Symposium on Bilingualism, Vigo*, (October), 22–26.  
<http://www.udc.es/dep/lx/cac/artigos/2002alvarez-caccamo-sib.pdf>
- Caulmas, F. (2005). *Sociolinguistics. The Study of Speakers Choices*. Cambridge: Cambridge University Press.
- Cook, V. (2001). *Second Language Learning and Teaching*. (3rd Ed.). Oxford: Oxford University Press.
- Dabene, L., & Danielle M. (1995). *Bilingual Speech of Migrant People*. Cambridge: Cambridge University Press.
- Gumperz, J. (1982). *Language and Social Identity*. Cambridge: Cambridge University Press.
- Hariri, K. Al. (2015). Using L1 in Teaching English to Advanced Students. *IJALEL* 4(6), 4–7.  
<https://doi.org/10.7575/aiac.ijalel.v.4n.6p.220>
- Heller, M. (1988). *Codeswitching: Anthropological and Sociolinguistics Perspectives*. Berlin: Mouton de Gruyter.
- Herlina K, C. (2007). Teacher's Use of COde Switching in the Classroom and Its Implications on Students' Score. *Jurnal Lingua Cultura*. 1 (2) 117–131.
- Hudson, R.A. (1996). *Sociolinguistics*. Cambridge University Press.
- Hymes. D. (1989). *Foundations in Sociolinguistics: An Ethnographic Approach*. Philadelphia: Clyde Bernhardt and Sheldon Harris.
- Ibrahim, E. H. E., Shah, M. I. A., & Armia, N. T. (2013). Code-Switching in English as a Foreign Language Classroom : Teachers ' Attitudes. *ELT*, 6 (7), 139–150.  
<https://doi.org/10.5539/elt.v6n7p139>
- Inuwa, Y. N. (2014). Significance of Hausa-English Code Switching, *Academic Research International*.

- 5 (May), 164–173.
- Iqbal, L. (2011). Linguistic Features of Code- Switching : A Study of Urdu / English Bilingual Teachers Classroom Interactions, *International Journal of Humanities and Social Science* 1(14), 243–244.
- Jingxia, L. (2010). Teachers ' Code-Switching to the L1 in EFL Classroom. *The Open Applied Linguistics Journal*, 3. 10–23.
- Jørgensen, J. N. (2003). Multi-Variety Code-Switching in Conversation 903 of the Køge Project, *Proceedings of the 19th Scandinavian Conference of Linguistics*, 31(5), 762–779.
- Krieger, D. (2005). Teaching ESL versus EFL: Principles and Practices. *English Teaching Forum*. 43, 2. <https://doi.org/10.1080/13670050802153236>
- Lin, A. (2013). Classroom code-switching : Three decades of research, *Applied Linguistics Review*. 4 (1) 0–26. <https://doi.org/10.1515/applirev-2013-0009>
- Ling, L. Y., Jin N. Y., Tong, C.S., & Tarmizi. M. A. (2014). Influence of an English Lecturer's Code-Switching Practice On Students' Confidence In The Subject. *International Journal of Asian Social Science*, 4(2) 226-233. [http://www.aessweb.com/pdf-files/Ijass-%204\(2\)%20226-233.pdf](http://www.aessweb.com/pdf-files/Ijass-%204(2)%20226-233.pdf)
- Martin-Jones, M. (1995). *Code-switching in the Classroom*. Cambridge: Cambridge University Press.
- Modupeola, O. R. (2013). Code- Switching as a teaching strategy : Implication for English Language teaching and learning in a multilingual society, *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)* 14(3), 92–94. <http://www.iosrjournals.org/iosr-jhss/papers/Vol14-issue3/P01439294.pdf?id=6710>
- Mugaddam, A.H., & Magid, M.M.(2013). Code Switching as an Interactive Tool in ESL Classrooms. *English Linguistics Research*. 2 (2). <http://www.sciedu.ca/journal/index.php/elr/article/viewFile/3228/1911>
- Mujiono. (2013). Code Switching in English as Foreign Language Instruction Practiced by the English Lecturers at Universities. *International Journal of Linguistics*. 5(2), 46–65. <https://doi.org/10.5296/ijl.v5i2.3561>
- Mujiono. (2016). Code Switching in English Instruction and Factors Affecting the Language Attitude of Indonesian EFL Learner in Using it. *IJSSES*, 2(4). <http://ijseses.org/wp-content/uploads/2016/06/Volume-2-Issue-4.pdf>
- Muysken, P. (2000). *Bilingual Speech A Typology of Code-Mixing*. Cambridge University Press.
- Poedjosoedarmo, S. (1978). Kode dan Alih Kode. Dalam *Widyaparwa*. 5 (2). Yogyakarta: Balai Penelitian Bahasa.
- Svendsen, E. (2014). Examensarbete i Engelska och Lärande The influences of Code-switching in the Second Language Classroom in connection to language development. <https://dspace.mah.se/bitstream/handle/2043/18110/Svendsen,%20Emelie.pdf;sequence=2>
- Zabrodska, A. (2007). University classroom code-switching, *Arizona Working Papers in SLA & Teaching* 139, 123–139. <http://slat.arizona.edu/sites/default/files/page/awp14zabrodska.pdf>